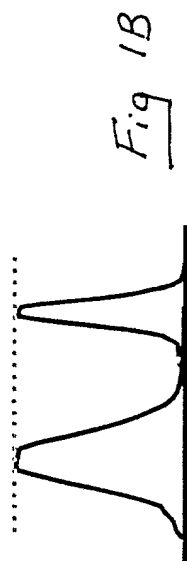
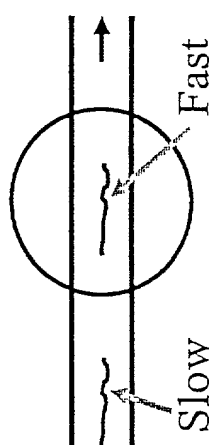
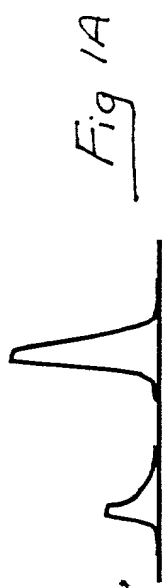
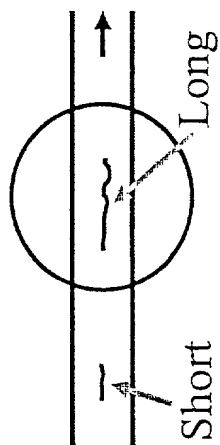


Fluorescence Signal



VIM - system

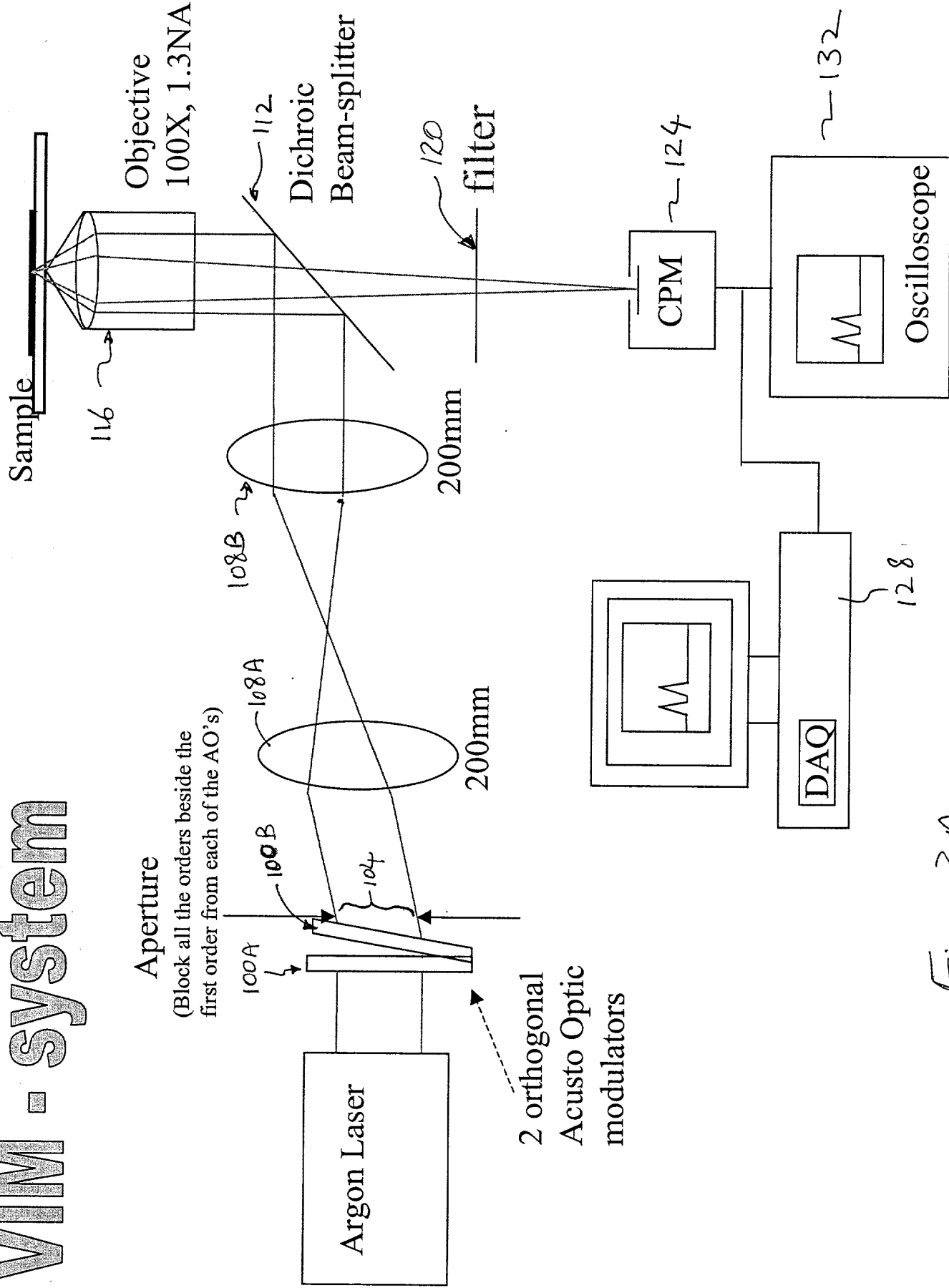
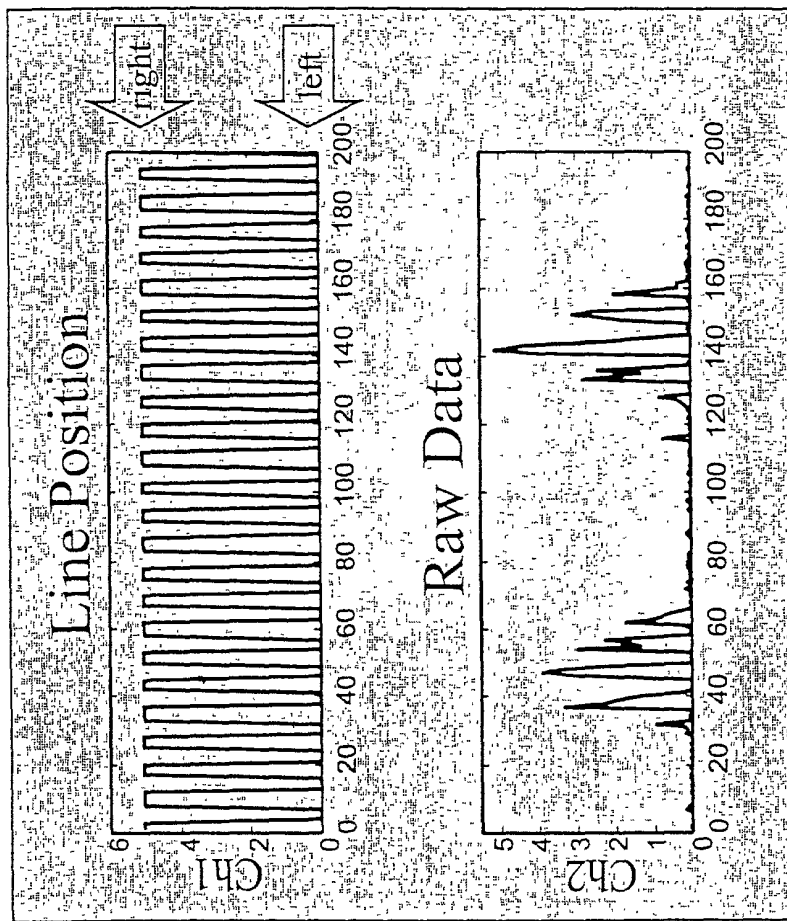
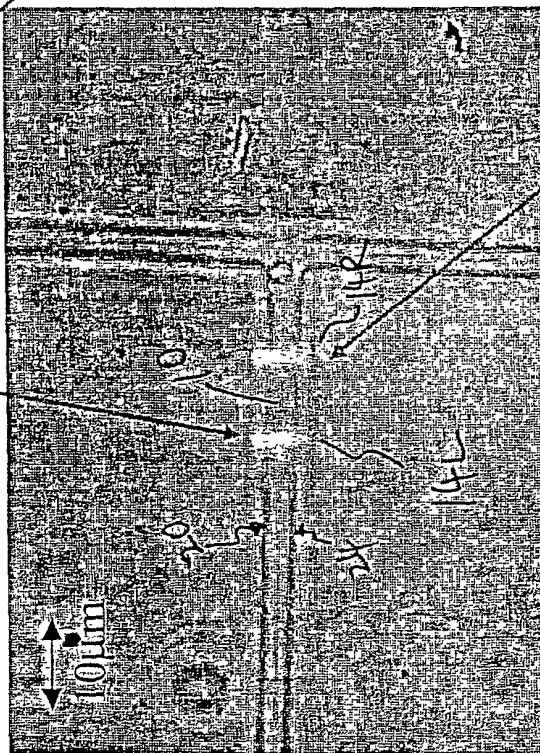


Fig 2A

Left Line Scan



Right Line Scan

Fig 2B

The beam after the two Acusto Optics Modulators

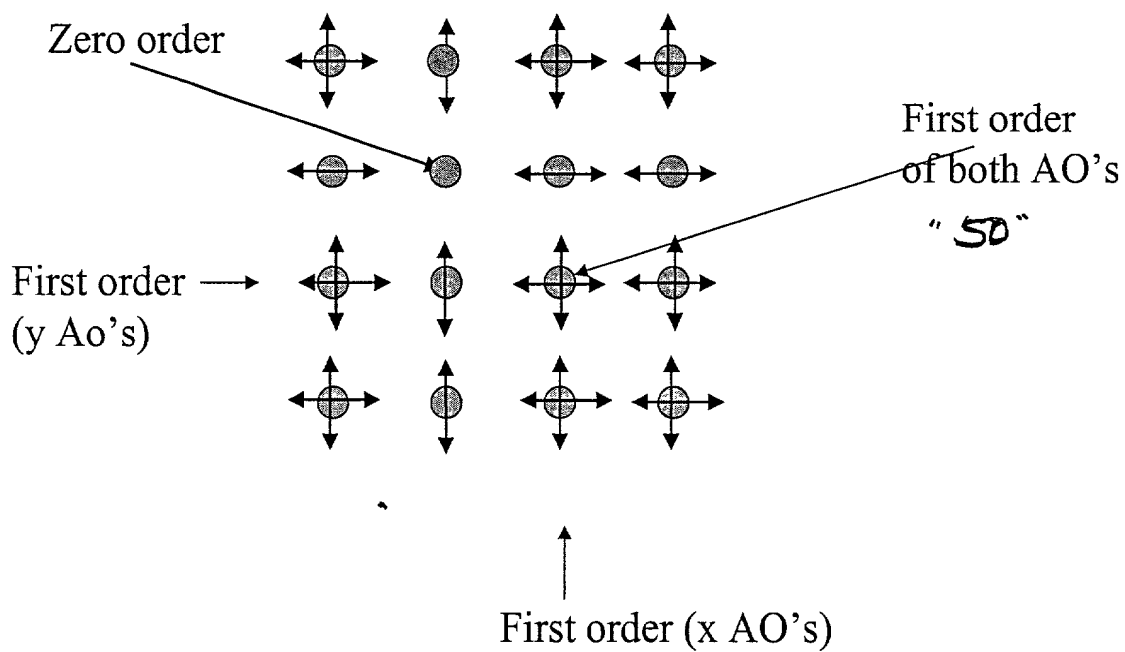


Fig 2C

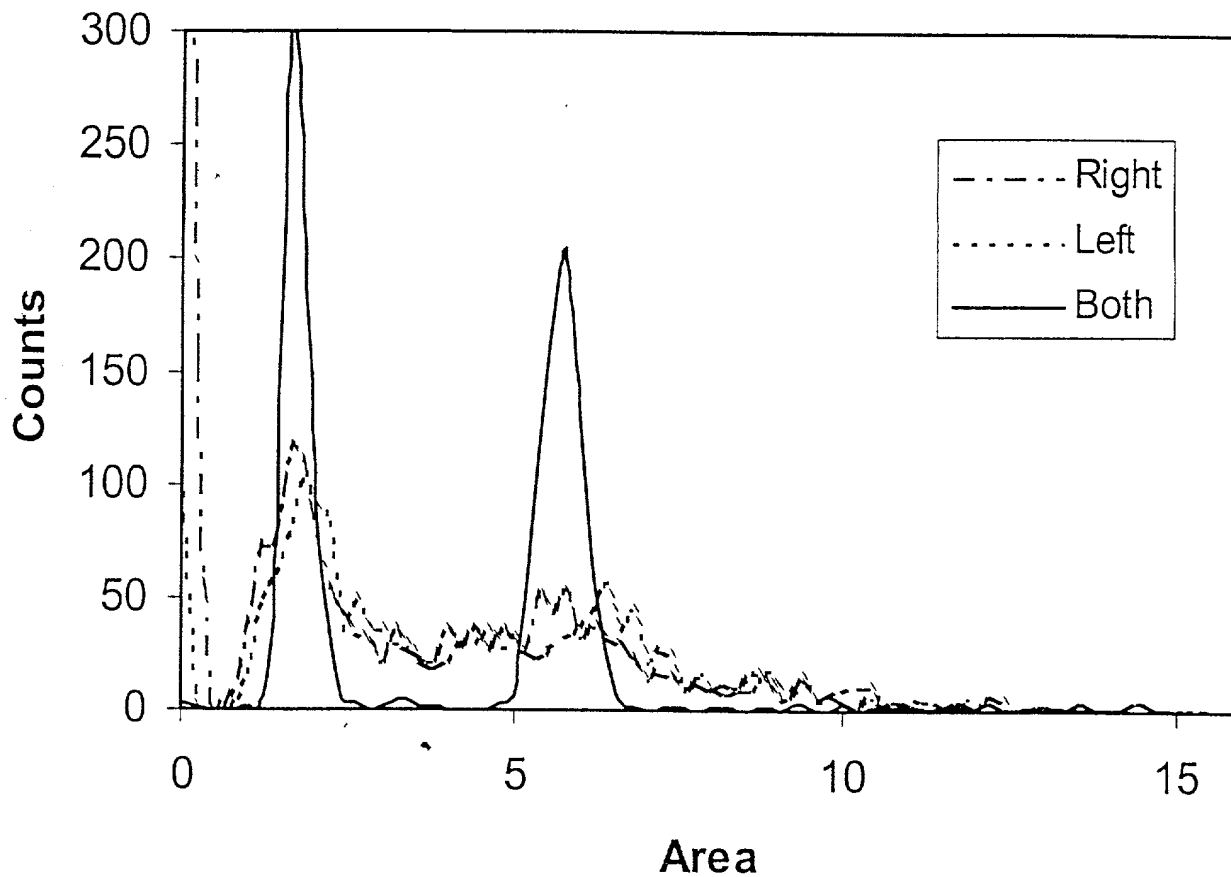


Fig 3

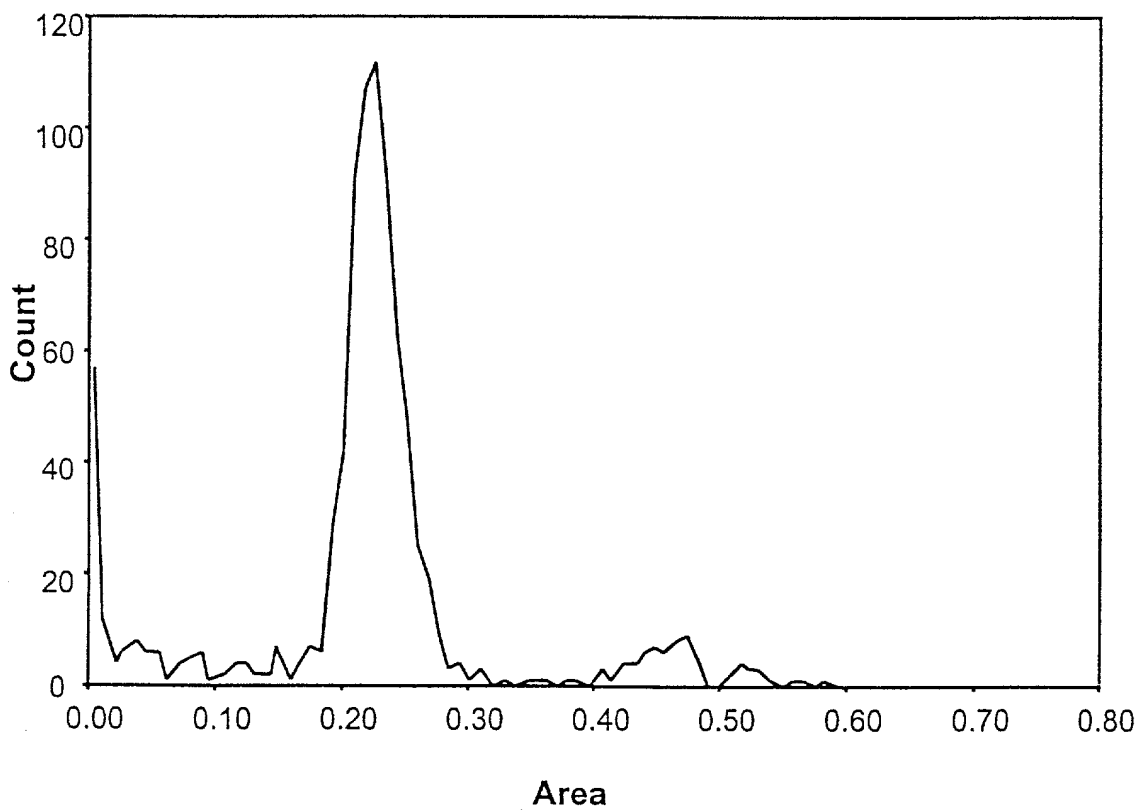


Fig 6

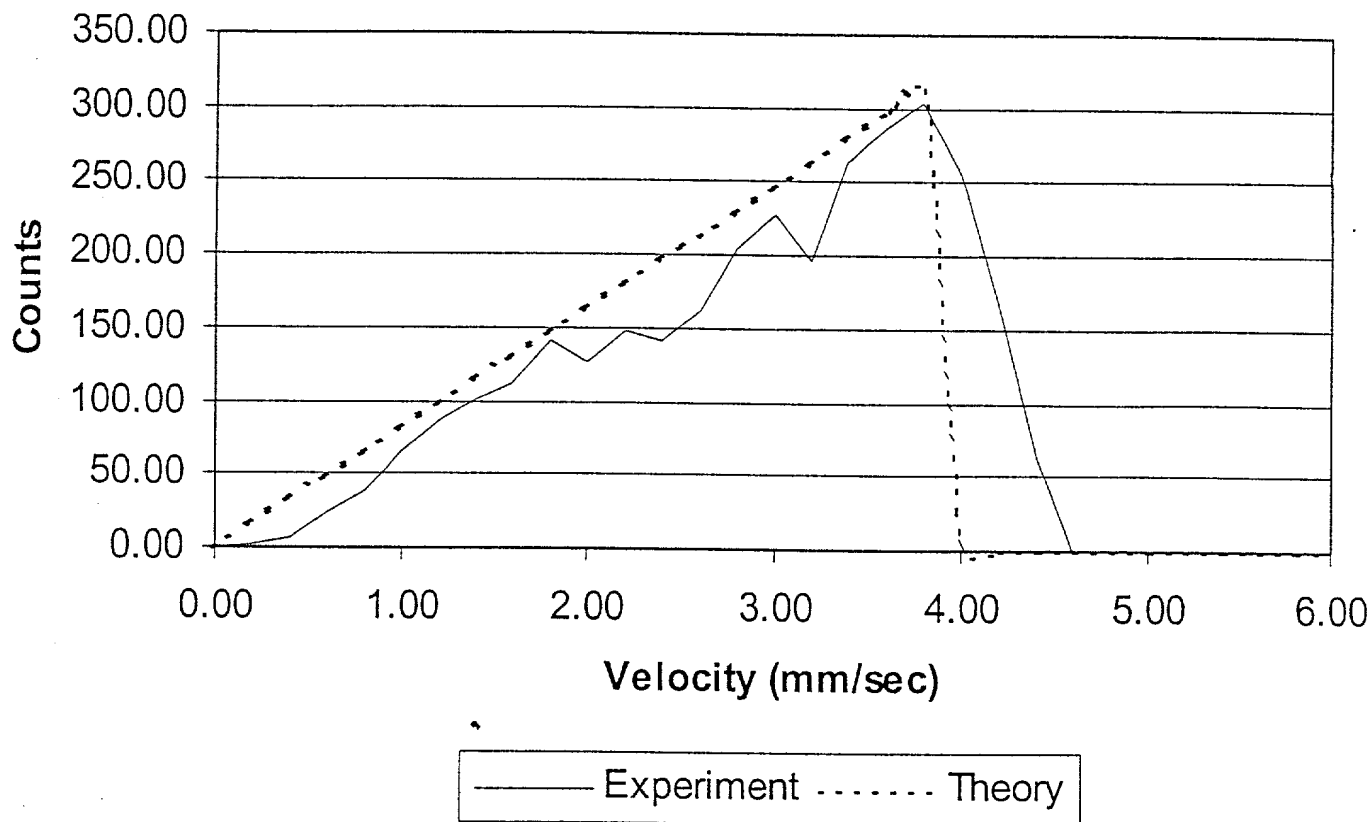


Fig 5

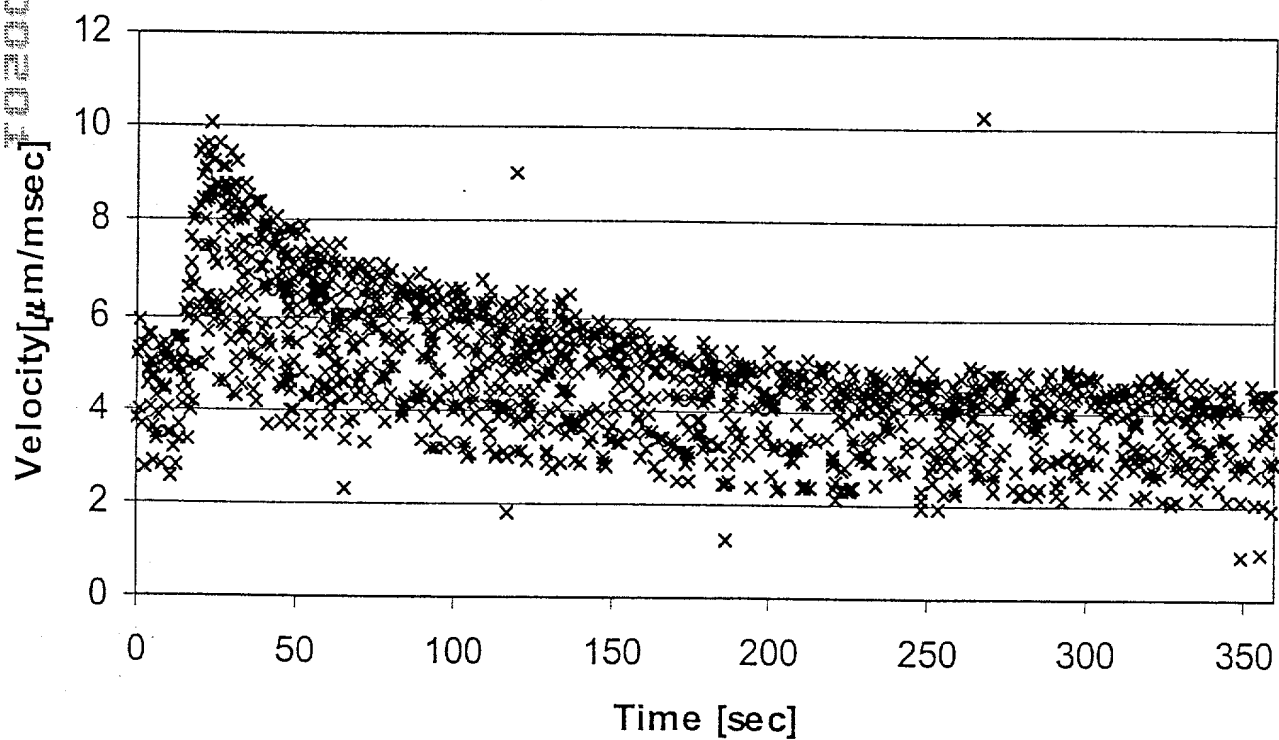


Fig 4

Station	Time	Lat.	Long.	Depth	Temp.	Wind	Wave	Cloud	Remarks
1	0800	34° 15' N	122° 00' W	10	55.0	10	2	100	Clear
2	0900	34° 30' N	121° 45' W	10	55.5	10	2	100	Clear
3	1000	34° 45' N	121° 30' W	10	56.0	10	2	100	Clear
4	1100	35° 00' N	121° 15' W	10	56.5	10	2	100	Clear
5	1200	35° 15' N	121° 00' W	10	57.0	10	2	100	Clear
6	1300	35° 30' N	120° 45' W	10	57.5	10	2	100	Clear
7	1400	35° 45' N	120° 30' W	10	58.0	10	2	100	Clear
8	1500	36° 00' N	120° 15' W	10	58.5	10	2	100	Clear
9	1600	36° 15' N	120° 00' W	10	59.0	10	2	100	Clear
10	1700	36° 30' N	119° 45' W	10	59.5	10	2	100	Clear
11	1800	36° 45' N	119° 30' W	10	60.0	10	2	100	Clear
12	1900	37° 00' N	119° 15' W	10	60.5	10	2	100	Clear
13	2000	37° 15' N	119° 00' W	10	61.0	10	2	100	Clear
14	2100	37° 30' N	118° 45' W	10	61.5	10	2	100	Clear
15	2200	37° 45' N	118° 30' W	10	62.0	10	2	100	Clear
16	2300	38° 00' N	118° 15' W	10	62.5	10	2	100	Clear
17	0000	38° 15' N	118° 00' W	10	63.0	10	2	100	Clear
18	0100	38° 30' N	117° 45' W	10	63.5	10	2	100	Clear
19	0200	38° 45' N	117° 30' W	10	64.0	10	2	100	Clear
20	0300	39° 00' N	117° 15' W	10	64.5	10	2	100	Clear
21	0400	39° 15' N	117° 00' W	10	65.0	10	2	100	Clear
22	0500	39° 30' N	116° 45' W	10	65.5	10	2	100	Clear
23	0600	39° 45' N	116° 30' W	10	66.0	10	2	100	Clear
24	0700	40° 00' N	116° 15' W	10	66.5	10	2	100	Clear

an) Usually Sampled at 40KHz

Usually Sampled
at 5KHz

Usually Sampled
at 5KHz

Usually Sampled
at 5KHz

Usually Sampled
at 5KHz

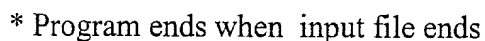


Fig 7

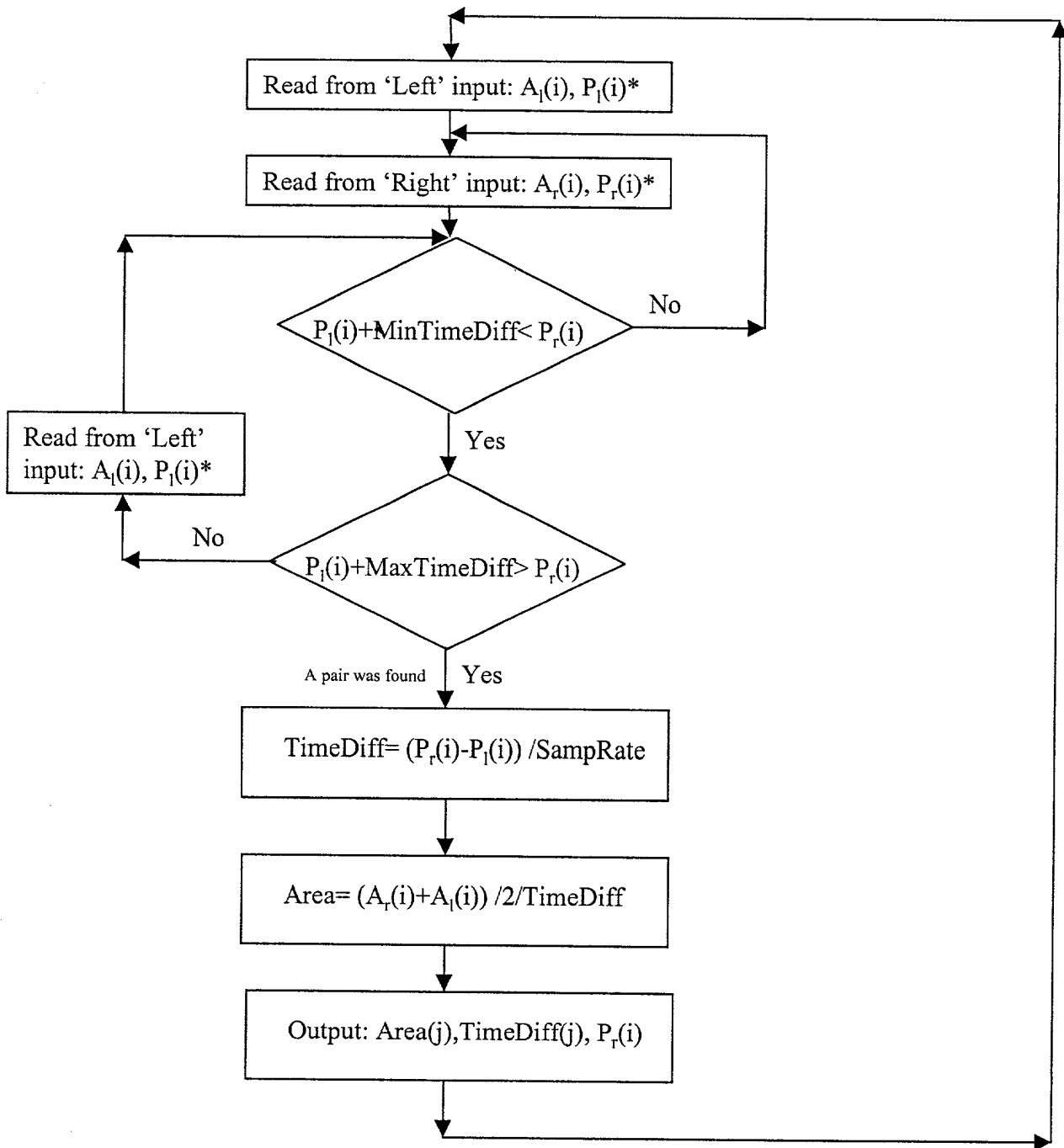
ArVlAnalyzer

Input: two files (one for each line scan).

Each file contain 2 vectors one of Positions ($P(i)$) and the other has the corresponding Area ($A(i)$)

Output: three vectors - Area, TimeDiff (inversely proportional to velocity), Position

Parameters that can be determined - MinTimeDiff, MaxTimeDiff



Position is presented in point number and not time

TimeDiff is in Seconds and is inversely proportional to the velocity

* Program ends when one of the input files ends

Fig 8